

# THE LEISURE HOUR.

A FAMILY JOURNAL OF INSTRUCTION AND RECREATION.

"BEHOLD IN THESE WHAT LEISURE HOURS DEMAND,—AMUSEMENT AND TRUE KNOWLEDGE HAND IN HAND."—*Cowper.*



THE COUNT INTRODUCES HIS POLITE INQUIRIES.

## THE EXILE'S TRUST:

A TALE OF THE FRENCH REVOLUTION.

CHAPTER VII.

On the same day in which they laid the green turf over him that had been called Chamone, and done the behests of Citizen Renne, the nearest neighbours observed smoke rising from a chimney in the habitable part of the "Crow's Nest," and in a short time it was known that the once popular Citizen had returned home. But Renne's popularity had passed away with the state of things in which it rose. All trace of him was lost

alike to friends and enemies, from the day of Jules' trial and acquittal; the forest people wondered what had become of him for some time; but, as the fierceness of the great Revolution subsided, and the public mind began to cool, Renne's memory cooled also—had he not been one of the Terror men?—and at length, as people everywhere are apt to do by the long absent, they partly forgot his existence; but Renne did not forget his own.

His retirement into private life, in the cellar of the wine-shop, was of considerable duration. Peronet did not pursue the search for him; but it was continued long and briskly by a host of minor enemies he had made in

the days of his power. They did not find him, however; and Renne at length contrived to leave the cellar and Paris, in the disguise of a pedlar, and thus equipped he travelled about the country for many a month more. When the Black Terrorists went down, and the White Terrorists got up, Renne found himself still more in danger; and, moving away eastward, he at length got into Switzerland, and assumed the character of a noble Royalist. Under that shelter he remained safe till the White Terror was over, and then Citizen Renne moved back to Paris, to look for place and power under the Directory. But his name was too well known in the Robespierre days: none of the governing men would compromise themselves by giving him employment; and after being attacked by the fishwomen, and chased for his life by a band of rag-gatherers, Renne bethought himself of the peace and safety that were to be found in his own half-ruined chateau in the forest country. There he had done no harm, as far as was known, and therefore he might live at ease among the forest people; but Citizen Renne had sunk into obscurity, which his slender resources, his barren land, and his half-ruined chateau did not permit him to emerge from. He had still his nobility to fall back on; the old respect for rank was creeping back to the minds of the forest people, as the land became more settled under a steady government, and things returned to something like their ancient places. He first dropped the title of Citizen and assumed that of Monsieur; next he resumed the distinguishing *de*, and lastly the complete style of Count de St. Renne.

It was the ancient designation of his line, under which they had ruled and been revered through many a feudal age; it still sounded high and grand in the ears of the old peasants, or the young who clung to old-world ways; but, with the title, Renne could not recall the numerous retinue, the liberal housekeeping, and the pompous goings forth in a coach-and-six, which were the wont of his ancestors on occasions of ceremony. The high-born Count was poor; but when from the upper and broken windows of his own chateau he looked westward over the dell, his eye rested on the fertile fields, the laden orchard, and the warm, well-kept manor-house of Devigne. There, dwelt a man increasing in riches and honour, who had foiled his deep-laid designs, and been the instrument of his fall from power and importance into the wine-shop cellar; yet the Count took every opportunity to show his respect for Jules Dubois, and sounded his praises to all the neighbours who were known to be ready repeaters. Jules heard of those tokens of good-will, and, though not a vain man, was not insensible to the honour and glory they gave him among his people; but Jules also had a recollection of the Abbey in Paris, and that last day in the streets with poor Chamone. He wished to keep clear of the Count's attentions, and succeeded for some time. But Renne was not the man to be kept at a distance; he made a point of bowing familiarly to Jules, whenever the latter came in sight; he waylaid the Closnets and Claude Lemette to make the kindest inquiries regarding him and his family, and sent trusty messengers to ask his advice touching the management of cattle and the cultivation of crops.

Jules was flattered, in spite of the Abbey and its reminiscences. As the summer wore away in the out-door life and labours of the Norman peasantry, many civilities were exchanged between him and the Count, and by the beginning of harvest they were on speaking terms.

It was a bright breezy day in that busy season; Jules' corn had been early gathered in, and he was standing by his threshing-floor—a primitive and picturesque, but by no means economical institution, which dates from

Scripture times in the East, and was common then in Normandy as it is in Brittany yet, consisting of a broad platform of hard and solid earth, formed in the most advantageous situation for sun and wind, between the farm-houses and the fields, where the corn might be threshed from the straw as soon as it was dry, winnowed and carried clean into the granary. Well, Jules was standing there, superintending the operations of Jean Closnet and Claude Lemette, with their old-fashioned flails, and winnowing his own corn in an equally old-fashioned sieve, with the help of Joan Closnet and his daughter Lucelle, when Count de St. Renne, in a coat which had belonged to his grandfather, and had still some remnants of silver lace upon it, carrying a silver-headed cane, and followed by a tall greyhound, came sauntering up the meadow.

"Good morning, Monsieur Dubois," he said, in his most polite tone. "Let me hope that I have the happiness of seeing you and all your people well. But why should I inquire? Health blooms on every cheek? This must be a most salubrious situation of yours. And what magnificent corn! it ought to command three francs a sack above any in Alençon market."

"It's fine corn; thanks to the Giver!" said Jules.

"It's well winnowed," replied the Count, surveying the heap of clean grain, and bestowing a glance of astonished admiration on young Lucelle, who stood by it. "I never saw corn so clear of chaff;" and he stepped closer up to Jules, in spite of the cloud which flails and sieves were sending right into his face, and whispered, "Can you tell me who is that charming girl?"

"My daughter," said Jules, pausing in his work, while a glow of paternal pride lit up his honest eyes.

"Your daughter!" said the Count; "oh, happy father! No wonder they call her the Rose of May! And her look assures me that she is as good as she is beautiful."

"That she is!" said Jules, fairly flattered out of his caution; "as good a daughter as man ever had. Come here, Lucelle; the Count thinks you are not the plainest girl in the village, nor the worst one; and for that I think you should bring him a cup of good cider out of the cask we keep under the hedge, to be at hand in this hot weather; and bring me a cup too, child. You see it is an excuse for myself I want, Count; but I hope you will taste our cider, and drink Lucelle's health."

"With all my heart!" said Renne, still gazing on the girl, whose bright curls streamed on the summer wind, as she came at her father's call, dropped him a Norman curtsy, and tripped away to fill two tall drinking-horns with sparkling cider out of the cask kept at hand, and returned with them to him and Jules. "Your health, Mademoiselle Dubois; health, happiness, and a good husband to you;" and the Count drained his horn with an air of perfect enthusiasm.

"I am sure Lucelle is obliged, and so am I, for your good wishes," said the delighted Jules. "We are but plain people, and cannot express ourselves fittingly to your lordship; but we are grateful."

"I like plain people; I am a plain man myself, as all St. Renne knows, and only speak as I think. Your daughter is a girl any father might be proud of. You have no other child, I believe? But she is enough; you will be able to give her a handsome dowry, I dare say; and I hope, my dear Dubois"—here the Count's voice sunk to a confidential whisper—"you will raise your family to the position I may say they deserve,

by marrying your heiress to a man of worth and rank."

"You are very good," said Jules; "but I hope to find an honest man for Lucelle; and, being but peasants, we can pretend no higher."

"What matter how people are born? Your own good fortune, not to speak of your merits and your daughter's beauty, should command a noble match; anything less would be throwing her away. But it is your dinner-hour, my friend—I see the flails laid down. I wish I were as near my own house as you are; for the sun is positively burning. Good-bye!"—and the Count slowly turned away.

"Come and take dinner with us, my lord, if it is not making too bold to ask you," said Jules. "You will find shelter from the sun, and good fare in our house, though we pretend to no finery."

"That's just what I like; and it is a real charity to give a man shelter in such a day, not to speak of a dinner," said Renne, as he joined the party from the threshing-floor, and walked into the Château Devigne for the first time in his life.

Ninette had spread the table with her accustomed care, and great was her surprise to see the unexpected guest. But the old nurse was a prudent woman; she bade the Count good day, with a low curtsy, which he graciously acknowledged; and then sat down with the entire household, who, after the old and homely fashion, all dined at one table. Lucelle's place was always at her father's right hand; but that day the Count sat between them, and nobody could make himself more at home than Renne. He conformed at once to the rustic customs of his company, knowing that different ways keep one a stranger; praised everything he saw or tasted; listened to Jules, and ingeniously drew him out on his favourite themes of crops, cattle, and sheep, deep ploughing and early sowing, the over-reaching habits of corn merchants, and the many tricks of millers. The Count heard all with eager interest; told his own experiences of the kind, and also the news of the surrounding country; showed deference to Ninette as the presiding matron; patronised the Closnets and poor Claude, and paid innumerable polite and delicate attentions to Lucelle. The girl was neither shy nor awkward; from infancy she had lived free and fearless among kindly neighbours and fresh, open fields; all the men she had seen were forest peasants, whose rustic gallantry or admiration, however sincere, had not the point and polish of Count de St. Renne's manner; yet, such is the instinct of honest natures, Lucelle shrank from his acquaintance, was uncharmed by his flatteries, and would have escaped his attentions if she could. On her father, however, the Count made a different impression; Jules was not accustomed to be made so much of; he had never been the great man in his native village, or even in his own house. The Count set him, as it were, before himself, in a grander light; and it told on his simple mind like new wine. Besides, was it not the nobly-born and highly-descended Leon de St. Renne, the representative of one of the oldest families in the forest country, who actually sat at his table, and talked with him as a friend? Jules felt himself elevated several degrees above his neighbours by such familiarity with rank and seigneurial rights, which no revolution could level to him; the Count, in his grandfather's old coat, still bore the title and boasted the blood of the St. Rennes; and the richest farmer or the most successful trader, compared with him, was but a peasant and a clown. The mid-day meal, which, except when crops were in danger, was generally sat over for two or three

hours in the hot harvest time, to let the fierce sun slack his rein, was prolonged far beyond its wont, to exchange healths and opinions with the Count, and give his lordship a pleasant walk home in the cool of the day.

The Closnets and Claude had gone back to work on the threshing-floor; Ninette sat spinning in the porch, and Lucelle sat knitting beside her. Both were silent, and thoughtful; the old woman's and the young girl's thoughts were different, but their subject was the same—the Count de St. Renne; and so was their conclusion, for neither of them liked the visitor. At length they saw Jules come out escorting his noble guest, and looking the hotter for the strong cider he had consumed.

"Permit me to pay my parting compliments to Mademoiselle Dubois," said the Count.

"Oh, certainly," said Jules; "Lucelle, my girl, come here and bid this noble gentleman good evening."

"Good evening, noble seigneur," said Lucelle, dropping her lowest curtsy.

"Good evening, Mademoiselle; permit me to salute your fair hand;" and the Count attempted to take it; but Lucelle sprang back as if something had bitten her, and never stopped till she reached the farthest corner of the ample porch. "Ah! I see I am no favourite," said the Count, terribly disconcerted, but endeavouring to look easy; "we will be better acquainted yet. Adieu." And he walked rapidly away.

"Fie, Lucelle!" cried Jules, as soon as his guest was out of sight; "where were thy manners, that thou couldst behave so to a grand seigneur like the Count de St. Renne, when he condescended to take such notice of thee?"

"I could not help it, father," said poor Lucelle; "he is a very grand seigneur, but I hope he won't come here again."

"Thou art a foolish child. What harm has the Count done to thee, that thou shouldst show such disrespect to my guest? Fie, Lucelle!" and Jules looked more angry than ever he had been seen to look before at his daughter, who, grieved and ashamed at his rebuke, though feeling she had done no wrong, stole away into the orchard, and took to gathering apples, but with tears in her eyes, under the laden trees.

"Jules," said Ninette, stopping her wheel and looking him steady in the face, when the girl was out of hearing, "for all the years we have been together in this goodly house, I pray thee think if it be wise or well to chide thine only child for failing in respect to one who proved himself no friend to her father?"

"By-gones ought to be by-gones, Ninette. Where is the use of keeping old offences in one's memory? Does not thine own Bible say we should forgive our enemies?" said Jules.

"That it does; but forgiving our enemies is one thing, and taking them into our houses is another. Listen to me, Jules," and the nurse's tone grew sad and solemn; "thou hast this day brought to thy table and into thy family an agent of the old serpent, who will do his work with thee and thine, I greatly fear, if our Lord prevent it not."

"Old women are always fearing something," said Jules, getting up in great scorn and anger, as people will do who know themselves to be in the wrong, yet cannot give up the course; "but I have a right to bring whom I please into my own house, I should think;" and with a stamp of resolution he marched away to the threshing-floor. Ninette cast after him a long foreboding look, as if she felt that there was further trouble in store for him and his; but then the pious woman looked up to the bright blue sky, on which the first soft shades

of evening were beginning to steal, and said, "Thou that didst overcome the tempter in the wilderness, foil him in this house and in this man's heart."

From that day Count de St. Renne was a constant visitor at the château. There was no end of the apologies he had for coming; sometimes it was advice he wanted, sometimes he had news to tell, and sometimes he came out of mere friendship. Every day seemed to make him more welcome to Jules, and every visit of his seemed to produce some change in the homely ways of the family. First, Jules found out that it was not fitting to entertain such a grand seigneur in the kitchen, which had hitherto served them as a sitting-room; the oak salle or parlour was opened, scoured out, and made habitable, as it was in the Sieur's time, and dinners and suppers had to be served there for the Count, himself, and his daughter. Then Jules had to learn some games to make the time pass: his pipe was not genteel enough before such a noble guest, and the Count did not smoke; but he undertook to teach Jules to play billiards; so the billiard-room was opened, and one after another the superior and handsomely furnished apartments, which Jules had shut up on his first coming to the château, were put in requisition. Such a change of ménage required an increase of retinue; two maid-servants were hired to assist Ninette and Joan Closnet in household affairs, and two useful men, besides a varying number of labourers, were retained for the field work. Those changes were known to be at the Count's suggestion; but the time was past when putting up above his neighbours would have been dangerous to Jules; and late as it was in life, he had got a sudden taste for gentility. The peasant's garb was too mean for him now, even on week days; he bought two suits of the newest fashion in Alençon, and brought home more dresses and millinery for Lucelle than had ever been seen in St. Renne since the Sieur lost his lady. Jules was becoming a sort of Sieur himself; he got the title of Monsieur from the Count, and his neighbours were advised through poor Claude, whom nobody would find fault with, that he expected it from them. Some of them gave it with a good will—Jules had done much good and no evil among them; some gave it with a smile of recollection; and all made remarks and comments at their own firesides.

The Count had wrought that domestic revolution, and the Count was never absent a whole day from the château. His friendship to Jules Dubois was wonderful, all the neighbours said, if it had been only shown in the old time of trouble; but by-and-by it became clear to all St. Renne that the Count's chief attraction to the château was Lucelle. Jules thought her a child yet—and Lucelle was little more—but the men of the village had begun to admire, and the women to criticise her. She was not the village belle, nor promised to be so. Modest, sensible, and frank, with the frankness of truth and innocence, Lucelle had none of the thousand airs, tricks, and artifices by which the coquette in court or country hamlet acquires and keeps her sway. But Lucelle was already the village beauty; her sweet face and finely-moulded figure were unequalled in all the forest country. She had got no schooling but the honest pious teaching of Ninette, from that one treasured volume; but it had made the motherless girl wise beyond her years, and good beyond most people of any age. She had seen nothing of what is called society, and never got a lesson in deportment; but native sense and native grace lent a charm to her manner which no artificial polish could impart; and the stiffest-necked peasant in St. Renne would pardon the rebellious ox

or the apple-stealing boy at the intercession of Dubois' winning daughter.

Moreover, Lucelle was believed to be heiress of the château and lands of Devigne. Had not her father bought them from the Sieur with his own savings? Had not his right held good in law even in the Terror time? and was not she his only child? The village gossips had been speculating for some time on the match Jules ought to expect for his daughter. The peasant-girls of Normandy marry early; and when the whisper rose regarding the Count's intentions, it was accepted as a very probable case. True, the Count was fully fifty years old—the contemporary of Lucelle's father; but, in spite of all his vicissitudes and risks, Leon de St. Renne was a well-preserved man; on his spare figure and sal-low complexion time could make little change; the fashion of the period left no beard to grow grey, and his thin, straight hair had kept its blackness. Besides, such a disparity of years was never rare among the wedded pairs of France, and there was the Count's noble blood and high connections, which were rising every day nearer to their ancient level in the esteem of the forest people. Some said it would certainly be a match. Some said Jules Dubois would be wiser to keep to his own station; and some said it would be a pity to lose such a girl with Leon de St. Renne.

If Lucelle did not think so too—being neither vain nor yet occupied about her match-making—she had her own thoughts of the Count, and they were not in his favour. Too young and inexperienced to weigh accurately the man's character and motives, and altogether unacquainted with the part he had played in her father's by-gone troubles, she was yet warned against him by those true and honest instincts which come before the knowledge or the wisdom of the world, and are the surest safeguards of innocence and youth. Lucelle did not like the Count, though she could not say why. The attentions which would have pleased a proud girl, and turned a vain one's head, were thrown away upon her. Too sensible and good to show aversion or disrespect to her father's guest, she made no demonstrations, but avoided his noble company when it was at all convenient to do so, and took the earliest opportunity to get out of doors when he visited the château.

If Jules had been making a clean breast of it—which was not his way, being of the still-water kind—he would have acknowledged that this was the only part of his daughter's conduct of which he did not approve. What the Count was and had been Jules knew better than any man in St. Renne; but sober and plodding people can be the best imposed on by those who take them properly in hand. Renne had listened to and flattered him till he half forgot, and half was inclined to gloss over, his old doings by the agency of poor Chamone, which, indeed, he never fully comprehended. Moreover, Jules had his own share of human pride and vanity, though they had lain dormant in the honest cares and labours of his peasant life; Renne had given him the first taste of grandeur, the first impulse to greatness as he knew it. The honour and glory of living in a château and owning an estate had never fairly dawned on him before; and then, to have a nobleman for his familiar guest and companion, and see him pay such marked attentions to his only daughter, the child of his love and the hope of his age, was sufficient to cover all the past, and make the Count a true friend in his eyes. True, the château and the estate were none of his; but nobody knew that, and he might as well have the use and the honour of them. The Sieur had said that if he or his son never came back they would be his own—and who knew that either

of them would ever return? The son had joined the army in Italy, the father had sailed for America long ago; for the travelling merchant, on his autumn rounds, had brought him Devigne's signet-ring, and there were the sea and the war both in his favour. Jules tried to put that thought from him as an unworthy and an evil one, but it came back, overleaping all the remembrance of early friendship and the bond of pledged faith. He would not have owned to himself that he wished the Sieur and his son never to return; but, if they never did, then all would be his, and Jules' thoughts began to run upon that if.

It always came up clearest when he sat and talked with the Count, the latter went so strongly on his ownership of land and château; and one day it recurred with mighty force, when, in the midst of teaching him to play billiards, Renne suddenly paused, and said, as if with a great effort, "Monsieur Dubois, I set out for Paris to-morrow on important business. I may say, between ourselves, it regards a legacy to which I am entitled by the will of a distant relation, just discovered by my lawyer. It will enable me to put my family château in repair, and live suitably to my rank; but, Monsieur Dubois, I cannot leave St. Renne and you without making known the wishes of my heart. Your charming daughter—nature intended her to be a countess—may I hope to offer her the title and the name of De St. Renne?"

"You are very good," said Jules, scattering the billiard-balls in his surprise and delight; "but you are far too grand a seigneur for us, Monsieur le Comte: Lucelle is but a peasant's daughter."

"Her father might call himself the Sieur Dabois, or the Sieur Devigne, if he pleased," said the Count, with a sly smile; "but that is not my consideration. It is the girl I love for herself alone; it is you whom I respect and wish to be connected with. My friend, shall we not become relations?" And he took Jules' hard-working hand and clasped it between his own smooth and white ones.

"Lucelle is too young to think of marrying yet, and I don't wish to part with my daughter, though it is a handsome offer you have made; but I would not force her to marry a prince against her own liking, and I am not sure that she likes you," stammered out Jules.

"Girls at her age never know their own minds, my friend; I can wait a little, though love is impatient. Let the marriage be an understood matter, and all will come right in time. Is it a bargain?" And the Count clasped the peasant's hand still more affectionately.

"Well, yes," said Jules, "if Lucelle and you can agree, I don't say against it in a year or two."

"Thanks, my dear Dubois; you have overwhelmed me with happiness," cried the Count. "But I'll leave you to be my advocate with your lovely daughter; for here comes my servant to tell me that a man of business whom I expected is waiting, and I shall not have the pleasure of seeing you again till my return from Paris. Adieu, my friend, adieu; my heart remains with you in the Château Devigne." And Renne hurried out to meet his servant on the lawn.

"If he knew that not a foot of the land or the château belonged to me or mine, would he ask my daughter in marriage?" thought Jules, as he watched the Count from the window, talking earnestly with his servant for a few minutes, and then walking hastily away; "but he says he loves her for herself alone. I have heard of great noblemen marrying poor peasant-girls in the good old times, and I am sure my Lucelle is fitter to be a countess than any of them."

## WASTE.

It is the boast of manufacturers in nearly all departments of production, that, owing to improved knowledge in practical chemistry, improved machinery, and new processes, they have succeeded in turning to a useful and profitable purpose vast quantities of material which in former times had to be wasted. And truly the boast is not ill founded, as the "shoddy aristocracy," both at home and beyond the Atlantic, might bear abundant testimony if they chose. But, independent of anything which might come under the general description of "shoddy," there are a host of products now-a-days good for merchandise which are all manufactured from what was once waste; and some of them, it is interesting to note, are among the most beautiful to view, and the most agreeable to the senses, of any of the achievements of human industry that are purchaseable for money. We might dilate on this subject to a considerable extent, and it is really a tempting one; but our object just now is not to point out the progress we have made in this direction—it is, on the contrary, to indicate the dismal want of progress which marks our insensibility in another.

We strain all our faculties to the utmost, and call art and science to our aid in stimulating the soil to bring forth "food to the eater and bread to the sower," and we waste it when it is ours: we plough the ocean and girdle the world with our ships, and sink a thousand human lives annually in their deep-sea graves, to bring to our tables the luxuries grown in other climes, and we waste them when we have got them. We face all hardships and perils of the desert, the forest, and the icy wildernesses of the polar regions, to wrest from them their treasures, and we waste them after all the labour they have cost. Of course, we don't do this designedly—we rather desire to economise and make the most of things for which we pay so dearly; but we do it, nevertheless, and that systematically, owing to the absurdity and the selfishness which characterise our methods of dealing with one another.

We shall briefly set down a few of the things the needless waste of which must be obvious to even a careless observer. With the summer months comes the annual supply of the summer fruits to London, to the growth of which some scores of thousands of acres are now devoted, for the most part in the vicinity of the metropolis. In an ordinary season there would be a sufficiency of these fruits to supply the whole population, who, under a just system of distribution, would probably consume the whole. But the distribution is not just, or even politic. The growers fix a high price, which is about doubled by the distributors—the object of both parties being to remunerate themselves with as little trouble as possible. Not until the fruit begins to decay, and is transformed more or less from a blessing to a pest-agent, is the price allowed to come down to the popular level—and the consequence is that huge quantities of it are never consumed at all, but rot and are thrown away. The summer and autumn of 1865 were prodigiously prolific in orchard and garden fruits; we saw tons of the finest kinds perishing on the ground for want of consumers; while at the same time the middle and lower classes were debarred from the free enjoyment of fruit, owing to the high prices. It would have cost but a trifle per cwt. to convey it to London, but the London dealers would not receive it at any price, simply because they could gain as much by selling a limited quantity at a high rate as by selling an unlimited quantity at a low rate. Thus, by the operation of a

kind of tacitly compacted monopoly, the bounty of Providence is not a bounty to the multitudinous masses of the capital, who need it most—and is shut from them by the customs that dominate our markets. It is frightful to reflect that during that summer many thousands of tons of ripe fruit ran to waste, while millions of our population suffered from the want of it.

Much the same thing takes place, though in a less wholesale way, in the distribution of imported fruits. Tons of oranges rot every season because there are no purchasers for them at current prices, and the owners will not sell them cheap for fear of influencing the market, so that they perish while waiting for a demand. In the case of dry fruits a like destruction attends their sale: raisins, currants, figs, dates, prunes—all the staple of the Mediterranean fruit trade—are in the same predicament, bidding for a high and abnormal price, which prevents their sale while they are in a good and wholesome condition—to be ultimately forced as bargains when they are scarcely fit for food, and to be in good part destroyed as waste. Towards the fall of the year grapes come over in abundance from the Continent, and might come over fifty-fold more abundantly than they do but for the greed of the dealers, who virtually prohibit their use to any but the wealthier classes by the maintenance of an unprincipled price. Tons of them are suffered to mildew and decay in our shops and stores rather than the factitious price should be lowered; and hundreds of tons of them never come to this country at all, which would come and be eagerly welcomed under a fair and honest system of dealing.

In the case of fish the system is no better, if it be not indeed rather worse. A writer in the "Times" tells us that the average price of fish to the Billingsgate dealers is no more than seven pounds a ton, or three farthings a pound. That for some fish, however, such as salmon and turbot at scarce seasons, it rises as high as £250 a ton, or half-a-crown a pound, we can state from actual observation, having more than once seen such fish so sold by the Billingsgate agents. Still, as a rule, seven pounds a ton would probably be the average price of all kinds of fish, taking the year throughout. Now what is the average price to the consumer? No housekeeper, it is presumed, would place it at lower than ninepence a pound the whole year through. This shows a profit of twelve hundred per cent.—a profit we should imagine which is utterly without a parallel in any other branch of commerce, and that too upon an article of universal and daily consumption! The dealers justify their profits on the ground of the perishable nature of the goods, which unavoidably leads to waste; and it is but fair to them to state that, huge as the profit is, it has to be divided between two or three and sometimes four distributors before the goods reach the consumer. Is it any wonder, looking at the prices, that an immense proportion of the goods never reach the consumer at all? What is the actual waste of fish in London there are no means of ascertaining, but that it is enormous and regularly recurring we are assured. The stalls of the dealers have invariably a fresh supply in the morning, whatever the unsold quantities of the night before. The Saturday market of London—the poor man's market—abounds in fish up to the last stroke of midnight, and no appreciable portion of what is then unsold is ever seen afterwards. How the unsold quantities are disposed of is perhaps one of the secrets of the trade; we can throw little light on it ourselves, though in times past, when business led us abroad at all hours of the night, we have now and then seen, about the dim dawn of morning, cart-loads of fish shot into the Thames to be got rid of.

A source of waste, to which too little attention has been paid, though it is well worthy of the consideration of economists, is one that owes its existence to our legislative enactments. It happens constantly that goods of various descriptions are lodged in our bonded warehouses, and being from unknown causes unclaimed by their proprietors, become worthless through lapse of time, and ceasing to be property become waste. Again, a vast amount of goods brought to the port of London, either purposely or ignorantly, in contravention of our excise laws, are seized by the custom-house officers and deliberately destroyed. A writer in the "Railway News," in describing the London docks, makes a startling statement in reference to this subject. "In a corner of the vast tobacco warehouse," he says, "is a peculiar institution officially designated 'the kiln,' as is indicated by a rude lettering on the door, with the initials V.R., and a clumsy drawing of a regal crown. The outer door unlocked, and its massive iron bars removed, access is obtained to a gloomy space, in which quantities of spoiled tobacco, cigars, tea, and contraband goods are waiting the next lighting of 'the Queen's pipe.' The pipe occupies the centre of the space, and consists of a circular brick-stalk, kiln-shaped at the bottom, and about five feet diameter within. A side door lettered 'V.R., the Kiln,' gives access to the interior. By this opening, the tobacco, cigars, &c., are thrown into the kiln upon a fire placed at the bottom. The last time her Majesty's pipe was lit, it consumed eight cwt. of cigars, and the time before that eighty tons of tea. Waiting a future lighting of the pipe are a number of very valuable books, all destined to destruction for attempted evasions of the Customs or Copyright Acts." A correspondent of the "Pall Mall Gazette," commenting on this institution, asks, "Cannot these articles be utilised as a source of revenue, or must they be wasted like our coal supply? They will scarcely pay off the National Debt, but eighty tons of tea would be welcome in some of our Government institutions, if paupers may not be benefited by untaxed and confiscated stuff; and Parliament, that did not object to a present of five thousand pounds' worth of biscuits to starving Circassians, would not have refused to let them have this tea to wash it down. There are waterside missions advertising for books for emigrant ships, and the library of many a hospital or charitable institute could be made passing rich by the very proper customs detection of this forbidden fruit. As for the cigars and tobacco, there are plenty of old Government pensioners who would be delighted to say of themselves 'We are the kiln.' A sale by auction for re-exportation only would defray some of the customs expenses, and be a greater gain to us taxpayers than the present utter and absolute waste." We beg leave to indorse this very sensible appeal in behalf of common prudence and common sense.

As for domestic waste—the waste of the necessities of life which takes place in our homes—it is greater among Englishmen than it is with any other nation on the face of the globe. Apart from our selecting only the finest grain for bread, and the finest part of the animals we slay for meat, while other nations eat all kinds of grain and the entire bulk of their animals, we are in the habit of wasting a large percentage of what we nominally consume. The materials of which other peoples make soup, the best and most nourishing of all diet, we systematically throw away, or spread as manure, or otherwise treat as refuse. The disjecta of our taverns, hotels, and eating-houses are not in fact half utilised; and untold quantities of this, now wasted, might be made by wise

management to minister to the support of the poor, by affording them good meals at a price they could afford to pay. French economy in this respect affords a capital example we might do well to follow. In Paris, the very focus of extravagance, as we make no scruple of calling it, nothing of this kind is wasted, but a sound practical economy permeates the whole city and turns everything to good account. As a result, the poorest Frenchman can dine at a cost to suit his means, even for a few halfpence. We have ourselves, by way of experiment, dined in Paris for twopence halfpenny, partaking of bread and meat, vegetables, and wine in sufficient quantity, and that at a time when butchers' meat was dearer there than it has ever been in London.

In conclusion, we should remember that we have the best of all authority against waste; inasmuch as He who supplies all our wants without stint admonishes us to "gather up the fragments, that nothing be lost."

### SIR WILLIAM HERSCHEL, K.C.H.

When a seventh primary planet was unexpectedly discovered in 1781, and its planetary nature decided, scientific men of all nations exhibited intense excitement, and hastened to offer their congratulations to the fortunate discoverer. To be the astronomer by whose means the existence of the planet Uranus was made known unto the world, was sufficient to bring him at once into the foremost rank of science. The astronomical reputation which Sir William Herschel then obtained is sufficient to justify us in considering him as the great pioneer of planetary discovery, which has received such an extraordinary impetus during the last twenty-two years, resulting, since 1845, in the addition of one superior planet and eighty-eight minor planets to the previously known members of the solar system.

William Herschel was born at Hanover on November 15th, 1738, being the third son of Isaac Herschel, an eminent musician resident in that city. His mother's name was Anna Ilse Moritzen. The limited means of Isaac Herschel prevented him from giving his children a satisfactory education. All of them, six of whom were sons, and four daughters, became, however, accomplished musicians. In 1759 William Herschel, then in his twenty-first year, visited England in company with his eldest brother, who was then leader of the band attached to a Hanoverian regiment quartered in this country. This period of his life is, however, involved in some obscurity; but there is no doubt that, for some time after his arrival in London, his musical talents did not provide him with sufficient employment to prevent him undergoing severe personal privations. This struggling for existence continued during the first two or three years of his residence in England; but he is reported to have never given himself up to despair. While in this condition, Lord Durham obtained for him the office of instructor to an English regiment stationed near the borders of Scotland. This appointment was the key to his advancement; for his reputation as a skilful musician gradually increased, which ultimately led to more permanent employment. In the year 1765 Herschel obtained the situation of organist at Halifax, the emoluments of which, in addition to the proceeds derived from private tuition, placed him in comparatively easy circumstances. His leisure time was now devoted to the study of languages, particularly Latin and Italian, and a little Greek, with no other assistance than his grammar and dictionary. He soon, however, attained considerable proficiency in each.

In the year 1766 Herschel obtained the more lucrative appointment of organist at the Octagon Chapel, at Bath. It was in that city that he began to direct attention to practical astronomy. During the early part of his residence there, his time was much taken up in public miscellaneous musical services, in addition to attending to an increased number of private pupils; yet he found opportunities for continuing his study of languages and mathematics with success. Sir W. Herschel was never a mathematician of the first order, but his natural talents were, however, very acute. Those who have had occasion to examine his numerous published papers must have perceived the evidence of a clear mind pervading all his researches; and there is little doubt that, had he received a special training in the exact sciences, his attainments and power of mathematical application would have been second to none. The constancy and determination which he exhibited while pursuing his self-taught acquirements have been seldom equalled. M. Arago has remarked that "it was through music that Herschel obtained a knowledge of mathematics; mathematics in its turn conducted him to optics, the first and fruitful source of his great success. The time had thus arrived when his theoretical knowledge was sufficient to assist the young musician in researches completely foreign to his usual occupations." The brilliant success and originality of most of these researches can be easily seen by reference to his numerous memoirs.

Herschel's mathematical studies first led him to an acquaintance with theoretical astronomy, and afterwards to a natural desire to examine the physical appearances of the celestial bodies, both planetary and stellar. A few years after he had commenced residence at Bath, a small telescope came into his possession. This instrument, imperfect as it was, was sufficiently good to exhibit many objects which were invisible to the naked eye. The first results of a scrutiny of the heavens with this telescope created the utmost enthusiasm in the young musician-astronomer's mind. Nothing, in fact, could satisfy his desires but the possession of superior instrumental means. He therefore determined to purchase another telescope, but of greater dimensions. His disappointment was great when he found that the price demanded by the optician was too excessive for his simple pecuniary resources. This result would have been sufficient to damp the ardour of most young philosophical inquirers; but in Herschel it only increased his determination to have what he desired. If he could not purchase a telescope, then he would construct one with his own hands. His whole energies were henceforth given up to experiments to obtain the proper metallic alloy which would be the best for reflecting light, and on the necessary means for giving the exact figure to the polished speculum. So rare a perseverance was sure to succeed. In 1774 Herschel had the satisfaction of examining the heavens with a Newtonian telescope of five feet focal length, constructed entirely by himself.

The leisure hours of Herschel were now fully occupied in these mechanical labours. During his residence at Bath he made a great number of Newtonian reflecting telescopes, varying from two feet to twenty feet in length, besides several others of the Gregorian form. It was his usual custom to select by trial, from the numerous specula which he was constantly casting, those whose surface was perfect in form. These were preserved, while the remainder were laid aside to be repolished. In this manner he made no less than 430 mirrors of different sizes, without including those for the Gregorian telescopes.

Herschel's great experience in constructing reflecting telescopes naturally created a desire for one of much larger dimensions. He therefore, in the year 1781, began to make one of thirty feet focal length. After having invented a stand for it, of a novel design, he cast the mirror, which was three feet in diameter. The composition of the metal being too brittle, the speculum cracked in cooling. It was then recast; but a second accident, arising from the furnace giving way, caused all the metal to run into the fire. These untoward interruptions put a temporary stop to Herschel's designs for constructing a reflecting telescope of large dimensions. As the novel discovery of a new planet fully occupied his thoughts soon after, the work he had in view was postponed to a more favourable opportunity.



SIR WILLIAM HERSCHEL.

This remarkable astronomical epoch may be considered the time when Herschel finally retired from the musical profession, to devote all his energies to his favourite science. His first published astronomical observations were made about the year 1776. The plan of observation marked out for himself was to examine successively different portions of the heavens, and to record every remarkable phenomenon. It was while occupied in these celestial researches, with one of his best telescopes, that he remarked, in the constellation Gemini, a star whose light appeared to him very different from that of the neighbouring stars. The magnifying power of his instrument was sufficient to exhibit a disk. On examining it with a more powerful magnifier he found that it increased in diameter, which was not the case with the other stars near it, and on that account he suspected it to be a comet. In a few days he found that the suspected object had changed its place, although its movement with respect to other stars was very slow. Herschel communicated his discovery to Dr. Maskelyne, then Astronomer-Royal, who, having examined it himself, sent information of the circumstance to the astronomers at Paris. The supposed comet was observed for some time, and

attempts were made to calculate its orbit, assuming it to be such. By degrees, however, it was perceived that its orbit was nearly circular, and consequently the new object was found to be a planet, forming the seventh known primary of the solar system. Herschel gave it the name of *Georgium Sidus*, in honour of King George III; French astronomers called it *Herschel*; while the Germans gave it the name of *Uranus*, the father of the gods. By universal consent the last name, *Uranus*, is now adopted in all countries. The date of the discovery was March 13th, 1781. The Royal Society the same year awarded the Copley Medal to the discoverer.

From this date the reputation of Herschel, no longer that of a musician, but as a skillful constructor of telescopes, and as an astronomer, was known over the whole civilised globe. He was presented to the King, who immediately attached him to the court, under the title of *Private Astronomer* to his Majesty. This was accompanied with a liberal salary, and a residence in the vicinity of Windsor. He then retired from Bath to the village of Datchet, and soon afterwards to Slough. This latter locality has thus been immortalised by its connection with the illustrious astronomer, who passed so many years within its boundaries.

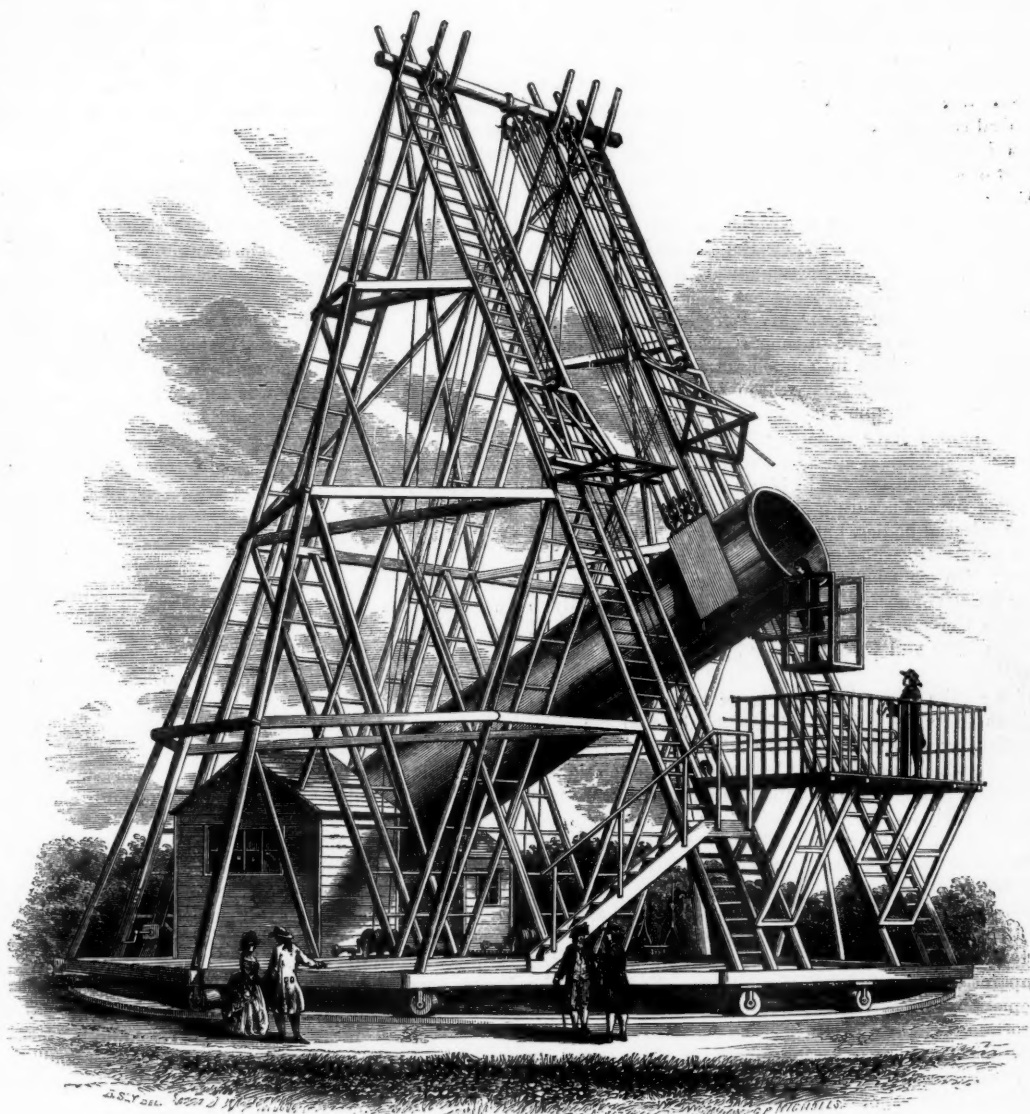
In 1783 Herschel constructed a tolerably large reflector, which he mounted in a similar manner to that which he afterwards adopted in the mounting of his celebrated forty-feet telescope. After two years' observation with it, the great advantage of large apertures for special observations appeared so clearly to him, that he resolved to renew his endeavours to obtain a speculum of large size. Encouraged by his former experiences, he consulted the President of the Royal Society, Sir Joseph Banks, who undertook to lay the design before George III. The King was not only pleased with it, but he agreed to bear the expenses of the construction of the telescope. The entire cost of the instrument, thus munificently defrayed by the King, was about £4,000. The construction of this great reflecting telescope was commenced at the latter end of 1785, and completed on the 28th August, 1789. A few details of its magnitude may be interesting. The focal length is thirty-nine feet four inches, and the diameter of the tube four feet ten inches. The tube is constructed entirely of iron. The great speculum, which is four feet in diameter, was placed at the lower end of the tube, the apparatus for adjusting it being protected by the wooden building. The reflecting surface of the mirror is about twelve and a half feet, while the whole speculum is composed of 1,050 lbs. of metal. To make an observation, three persons were always required—the observer, who stood in the gallery at the mouth of the tube; an assistant, to write down the observations and remarks, which were conveyed to him through a speaking tube; the third person being requisite to work the windlass used in directing the telescope to any particular object.

This celebrated instrument, which has done such noble service in the cause of astronomical discovery, was dismantled in December 1839. On the return of Sir John Herschel from South Africa, he found that the wood-work had become so much decayed as to be absolutely dangerous. He therefore resolved to take the instrument to pieces. Arrangements were, however, made to preserve the different parts of the telescope on the spot where it had stood during so many years. The frame-work having been cleared away, piers were erected, on which the tube was placed in a horizontal position. Inside the tube were deposited the reflector, and all the important portions of the

machinery and polishing apparatus. The end of the tube was then closed up. Before this was done, and while the tube was empty, seats were placed within it, sufficient to accommodate the whole of Sir J. Herschel's family, when a requiem song was sung by "Papa, Mamma, Madame, and all the little bodies in the tube

"There are wonders no living wight hath seen,  
Which within this hollow have pictured been;  
Which mortal record can ne'er recall,  
And are known to Him only who makes them all.  
Merrily, merrily, etc.

"Here watched our father the wintry Night,  
And his gaze hath been fed with pre-Adamite light;



SIR W. HERSCHEL'S FORTY-FEET REFLECTING TELESCOPE.

thereof assembled." This song, which is considered a literary-scientific curiosity, was written by Sir John. The following are the first five stanzas:—

"In the old Telescope's tube we sit,  
And the shades of the past around us flit;  
His requiem sing we, with shout and with din,  
While the old year goes out, and the new one comes in.

*Chorus of youths and virgins.*

Merrily, merrily, let us all sing,  
And make the old Telescope rattle and ring.

"Full fifty years did he laugh at the storm,  
And the blast could not shake his majestic form;  
Now prone he lies, where he once stood high,  
And search'd the deep heavens with his broad bright eye.  
Merrily, merrily, etc.

While planets above him in mystic dance  
Sent down on his toils a propitious glance.  
Merrily, merrily, etc.

"He has stretched him quietly down at length,  
To bask in the starlight his giant strength;  
And Time shall here a rough morsel find,  
For his steel-devouring teeth to grind.  
Merrily, merrily, etc."

With this forty-feet telescope every celestial object at which it was directed was exhibited under a very different phase from that which was previously known; in fact, the heavens had never been scanned by such a powerful telescope before. A considerable number of the nebulae which had hitherto appeared in the usual gaseous form

were each resolved into an innumerable multitude of stars; others, again, which had been scarcely perceptible, became distinctly visible. This section of astronomy occupied much of Dr. Herschel's time, as is evident from the catalogues of nebulae and clusters of stars published by the Royal Society. In later times the extraordinary appearances of some of the nebulae as exhibited by the great six-foot reflector of the Earl of Rosse have thrown still more light on this remarkable "star-dust" of the heavens. Some very recent observations of the spectra of the nebulae have also tended to increase our knowledge considerably with regard to the chemical constitution of these faint objects.

On December 6th, 1781, Mr. Herschel was elected a Fellow of the Royal Society; and in 1786 the University of Oxford conferred on him the degree of Doctor of Laws. In 1816 he was made a Knight of the Hanoverian Guelphic Order by the Prince Regent, and, on the formation of the Royal Astronomical Society, he was elected its first President.

The observations of Sir W. Herschel have been so numerous and so varied in their character, that it is impossible to enter here into much detail respecting them. Most of his discoveries have been confirmed by the observations of subsequent astronomers; and the results of his deductions have generally been received with the greatest respect. It must be understood, however, that the telescopes constructed by him were not instruments of precision for the accurate determination of the positions of the celestial bodies, but rather gazing instruments of great penetrating power, used for the purposes of discovery. To see what Sir W. Herschel has done in this latter branch of observational astronomy, we have only to examine the results of his sixty-nine papers published between 1780 and 1815 in the "Philosophical Transactions."

If we take the solar system as an example of the subjects to which Sir W. Herschel devoted his chief attention, we shall soon obtain a slight idea of the kind of labour which occupied the hours of this indefatigable astronomer. Passing over much valuable work, we find him, so early as 1777, investigating the rotation of Venus; and, in 1781 and 1784, some important discoveries are recorded in two memoirs relating to the remarkable appearances at the polar regions of the planet Mars, the inclination of, and rotation round, its axis, the position of its poles, etc. He also obtained some important results on the axial rotation of Jupiter, and of the comparative magnitude of its satellites. Soon after the completion of the great forty-foot reflector, he published an important memoir on Saturn, with remarks on the construction of its ring, its atmosphere, its rotation on its axis, and its spheroidal figure. This memoir also contains an account of the discovery of two additional satellites of extreme faintness; one, Enceladus, having been detected on the evening of the day on which the great speculum received its final polish, on August 28th, 1789; the other, Mimas, which is the nearest satellite to Saturn, was discovered on September 17th, 1789.

We have already mentioned the circumstances connected with the discovery of Uranus. In Herschel's subsequent observations of this planet, he detected six very faint objects, which he supposed to be satellites. Two of these only have been identified by later astronomers. Mr. Lassell has found two new satellites, which, however, do not agree in position with any of those seen by Sir W. Herschel. We are, therefore, at present only certain of four moons belonging to Uranus. Besides these planetary researches, Sir W. Herschel has published several important memoirs on comets.

A mere catalogue of the different investigations and observations of Sir W. Herschel would occupy nearly all the space allotted to this article; but from what we have already shown it is not difficult to obtain some notion of the kind of research which deservedly raised him to be the leading astronomer of his age. The number of nights employed in the scrutiny of the nebulae and star-clusters must have been very great; while the necessary work in the study before his observations could be made available to astronomers, probably occupied much of his time during the day. Among his miscellaneous memoirs, those relating to the movement of the solar system in space strikingly exhibit the originality and power of his mind.

In the construction of his telescopes Sir W. Herschel was fortunate in having the assistance of his brother Alexander, who was skilled in theoretical and practical mechanics. Alexander superintended the workshops, and carried out the wishes of his brother with the greatest devotion. Their sister, Caroline Lucretia, resided with them. This lady soon acquired a considerable knowledge of mathematics and astronomy, and from choice became the amanuensis of her brother. While the devoted astronomer was elevated in the air, beholding in his far-famed telescope some new feature never before observed, the equally devoted sister would silently record the observations, rejoicing that additional reputation was in store for him who was so dear to her. Arduous, however, as these occupations must appear, especially when we consider that her brother's observations generally continued till day-break, and chiefly in the winter season, yet they were not sufficient to exhaust her activity. At intervals she found time to make astronomical observations of her own, and to execute more than one work of considerable research. Her observations were made with a small Newtonian telescope, with which, whenever her brother was absent or prevented from his regular course of observation, she searched the heavens for comets, of which she found no less than eight, five being first discoveries. She also detected several remarkable nebulae and clusters of stars not previously observed. For the reduction and arrangement into the form of a catalogue of all the nebulae and clusters observed by her brother, she received the gold medal of the Astronomical Society in 1828; of which society she was also elected an honorary member. After the death of her brother, she retired to Hanover, having resided in England fifty years. The latter part of her life was passed in repose, in the enjoyment of the society of her remaining relatives and friends; her faculties continuing perfect and her memory remarkably clear and distinct. She died tranquilly and free from suffering on January 9th, 1848, at the great age of ninety-eight.

Sir W. Herschel married a widow lady of some property. This, in addition to his pension from the Crown, and the profits arising from the sale of the numerous specula for telescopes, which were made in his workshops, soon placed him in affluent circumstances. The last few years of his life were passed in ease and retirement at Slough, under the shadow of his great telescope, with a mind contented and happy, rejoicing at the brilliant academical career of his only son, who was destined to add fresh glory to his name. Sir William died peacefully on August 23rd, 1822, in his eighty-fourth year.

The following remarks by M. Fourier, a distinguished French savant, appropriately conclude this brief sketch of the illustrious astronomer:—"In his isolated retreat, ornamented by the fine arts, and still more by peace and

domestic virtue, Herschel, exempt from every care, surrounded by a cherished wife and a family consecrated to science, devoted himself implicitly to his favourite pursuits; and, to borrow the expression of one of the most celebrated of his contemporaries, it was from the quiet village of Slough that the world obtained the information of the discovery of anything novel in the heavens; though, from want of sufficient instrumental means, it might, perhaps, be difficult for others to comprehend fully the importance of the discovery."

### A VISIT TO SALTARE.

BEING in the neighbourhood of Bradford, and hearing on all sides of "the Model Mill at Saltare," I was curious to visit it. On writing to the proprietor, I received not only a kind permit to view the works, but he further himself met our party and explained to us the plans of the place. The reader may be gratified with some account of what we saw.

Saltare is situated about four miles from Bradford, and less than one from the village of Shipley. This locality was selected by Mr. Salt as peculiarly suitable, from its being intersected by the river Aire, which offered a good supply of water; whilst the Leeds and Liverpool Canal, or the Bradford Railway, would be all-efficient for the transport of merchandise. In visiting Saltare now, one can hardly credit that twenty years ago no such place existed, and that all that one there witnesses is the result of one man's untiring energy and vigorous intellect. On entering from Shipley, we were struck by the regular and picturesque appearance the village presents, the houses of the operatives, though of different classes and size, being built on one architectural plan, looking far more like small villa residences than working men's abodes. There are already eight hundred of these houses, with gardens adjoining, where the inhabitants can cultivate their own vegetables, fruit, and flowers. Wide streets and large squares intersect the place, at the base of which the river Aire flows.

My account will not go into many technical details; for it is impossible for one not versed in the various terms and appliances of machinery to attempt a description of the wheels within wheels, the endless arrangements, the stupendous steam apparatus, and the wondrous complicated mechanism that in every portion of the building bewildered our senses. But the points of general interest can be understood by every visitor. The premises occupied by the mill, warehouses, and sheds at Saltare cover eight acres of ground, and are built of massive white stone taken from quarries in the vicinity of Bradford. The principal buildings are in a bold Italian style of architecture, forming in outline a representation of the letter T, the horizontal portion of that figure being the mill itself, the façade of which is 550 feet in length, and 72 in height, divided into six storeys. There are two large engine-houses on either side of the principal entrance, over which extends one long undivided room, perhaps the largest to be found in England, and which seemed to us a walk in itself to traverse. The roof is of ornamental iron-work, such as is seen at modern railway stations, whilst the question of ventilation has been carefully attended to, and throughout, the atmosphere of the work-room appeared free from everything noxious. The windows are large, and of plate glass. The entire building is fire-proof, and massive iron doors inclose each department.

That portion of the building which runs northwards towards the canal occupies a space of some 400 feet, and

is appropriated to the various warehouses: in these there are no less than seven floors, including the basement. The whole height is reached by a stone staircase; but it is no little saving of time and fatigue to the visitor to use the hoists provided for the officials, in mounting to the various departments. The mill roof is converted into a large tank, capable of containing 70,000 gallons of water, which is supplied from the river by means of engine-pumps; and in case of fire the remedy is always at hand. This tank also serves to supply the houses with water.

The angles of the building, as described in the T, are used for various purposes, such as storing the fleeces on their arrival, washing, sorting, cleaning, dyeing the wool, etc. The western angle is appropriated to the combing machines, one of the most curious of all the inventions in mechanism that we saw. In connection also with this portion of the works is an enormous filter and reservoir, into which the rain water from the entire building is conducted. This filter is constructed to hold 500,000 gallons of water, which is used in the process of cleansing and scouring the wool, etc. Near the combing shed is another set of offices, further occupying a frontage of 240 feet. The most prominent feature in the whole buildings is, however, the chimney, which measures at the base 18 feet square. Its height is 250 feet; its architecture is really beautiful, and it is highly ornamented at base and summit with suitable embellishments. So little does it resemble what it really is, that, seen in the distance, it gives the idea of a stately column erected by some hero-worshipper. The boiler-house stands in the vicinity of the chimney, and contains eight huge boilers.

The entire village and buildings are lighted by gas, the gasometer being situated at some little distance, near the river. A most brilliant effect must the mill indeed have when lighted up, resembling such a palace of industry as one might read about in the "Arabian Nights," the gasometer being constructed to supply for the mill, buildings, and houses, no less than 5,000 burners. The luxury of gas in the houses must be a great boon to the operatives. I have already said that the engine-houses are on either side of the principal entrance; and here our party began the tour of inspection. Leaving the engine-room, we saw in rotation the various processes of cleaning, carding, sponging, and combing the wool, in each of which the machinery used was of a most ingenious kind; that for combing the cloth when manufactured, most especially interested us to watch. The finest teeth-like instrument passed over the surface of the material, shaving it to a nicety of every superabundant roughness. The weaving-shed is on the ground-floor, and contains no less than 1,200 looms, among which we passed up and down. Every colour and texture of alpaca stuff was being manufactured here, whilst, as the looms, impelled by steam, worked away, children of different ages performed their part in tending them, watching for every broken thread, which they speedily rectified. Curious was it to stand and watch the fabrication of the stuff, as with clock-like precision the machinery did its work, and never a thread wrong or a pattern wanting in form or colour. In this one room our conductor informed us no less than 30,000 yards of alpaca were often manufactured in a day. This represents just eighteen miles of cloth, whilst a year's calculation of labour might almost make one imagine alpaca cloth was the patent article of dress for the entire globe. From this busy little world we trusted ourselves to the friendly hoist, and visited, in succession, every storey. In each, the iron and the human machinery combined, were hard at work, fulfilling their appointed tasks; and by the time we descended to

earth again, our minds were considerably enlarged as to the one article of commerce connected with the alpaca dresses we had often so unthinkingly purchased.

Respecting the workpeople, on whose labour the success of the enterprise so greatly depends, for many thousands of hands are employed in this small kingdom of Saltaire, I will first notice the children. Unlike many of their brethren in similar occupations, whose infantile sorrows have become the theme of public pity, and who are debarred from either play, education, or home ties, who work in stifling rooms and unhealthy air, until deformity and premature disease are stamped on their young lives—these young operatives are all under the wise and humane arrangement of the half-time system, which obliges the alternation of work and study in due succession. This system is here and elsewhere proved to be fruitful both of health and knowledge. The weary body, when it leaves its scene of labour, is refreshed by mental effort, and when it returns again to its manual occupation, it brings with it, from the exercise of head application, an awakened interest to its work, which purely mechanical labour ever lacks. In every case in which this half-time system has been tried, a good result has been obtained; yet masters have been slow to adopt the practice, for fear of losing thereby. This is a great mistake. In proof of the benefit, a test was lately made of the amount of work done by the half-timers, as they are termed, when both the quantity and quality of their labour was found to surpass that of the whole-day workers.

Not among the least of Mr. Titus Salt's benevolent efforts for the advancement of his operatives are the schools, in which all the children are taught; these we visited, and saw about two hundred and fifty children at their lessons. These represented half the number belonging to the school; the remainder, then busy in the mill, would, in their turn, next morning take their places behind the desk, whilst those we saw would go to work in the mill. There was also an infant school for the little ones. Both the rooms and the children were scrupulously clean and tidy, and the latter exhibited much intelligence in replying to the questions we asked them. In the girls' school I was glad to find that both needlework and that old-fashioned but useful accomplishment knitting, were not forgotten as part of a girl's education. Between the ages of eight and thirteen, the children are on the half-time system; after that they remain all day in the mill. Their wages average from 6s. downwards, according to age and capability.

In Saltaire, as in all manufacturing places, the wealth of a family mainly depends on the numbers it represents; and where there are many children, their earnings, united to their parents', form an income that sets them far above want, and from which, if prudent, they may lay by a store against a rainy day. Towards this preventive measure Mr. Salt has not forgotten to provide; in the village there is a savings bank all ready at their door, besides various provident clubs of different kinds.

The women with whom we conversed in the mills were bright and cheery, and gave a satisfactory account of their work and their homes, acknowledging with gratitude that they indeed worked for a kind master, and that, in comparison with many others in like occupations, their lot had fallen in a pleasant place. Accustomed during late years to come much in contact with the London poor, I was curious to learn what difference existed in the relative price of rent; for, making all due allowance for country and town, I feared, as I looked at the prettily-finished villas outside the mill, with their neat gardens by, that the inmates might possibly have

to pay a fancy price for the comparative luxuries they enjoyed. The houses, I found, were mostly let in flats, comprising two bed-rooms, a kitchen, and a parlour, whilst this amount of accommodation could be obtained at from 2s. 10d. to 3s. 6d., according to size. Compare such a home and its appliances with the single garrets and cellars in London which fetch an equal sum. Nor can the reduced rent be looked on as the only advantage, for pure water *ad libitum* and a clear healthy atmosphere are luxuries which generally cost dear, and cannot always be had even for money.

A mechanics' institute, adult schools, clubs, etc., stimulate the mental improvement of the male portion of the community; whilst last, but not least, religious teaching and worship—those fundamental pillars on which all real improvement must rest—have been provided for by Mr. Salt, by the erection of an extremely handsome church. This latter stands in a large open space, opposite the mill, inclosed in iron railings, and is approached by wide gravel walks bounded on either side by close-mown grass plots. The church is a noble structure, erected at a cost of from nine to ten thousand pounds. We entered, and were much pleased with the interior, which is handsomely fitted up, yet not in too gaudy a style; the roof is a barreled one, the pillars of marble. It is lighted by chandeliers from the roof, which in design are the most beautiful of the size I have ever seen. It is pewed throughout in carved oak, each pew being comfortably cushioned in red cloth. All the sittings are free alike for the use of the operatives.

Due attention to the sewage question has not been omitted, and sanitary measures under this head are enforced throughout the settlement.

One other feature of Saltaire I must not omit to notice. Adopting the old motto, "Prevention is better than cure," Mr. Salt, from the first, purposely omitted, in the plans of his model mill, to build any public-house on the grounds, or to license any dwelling already built for that purpose. Hence, gin-palaces, taverns, ale-houses, with which elsewhere every street abounds, are unknown. Yet Mr. Titus Salt is not a teetotaler, nor does he enforce temperance pledges on his workmen. If a man wishes for beer, he can get it, but then he must walk into Shipley for it, or keep a barrel in his own house. Under ordinary circumstances, say in five cases out of six, it is the proximity to the beer-shop, the glittering lights of the gin-palace, that induce the temptation to go in and drink, whilst the one glass is but the precursor of many more, till wages are diminished and senses dulled.

Of Mr. Titus Salt himself I need add but little. In his earlier days an inhabitant of Bradford, and one of the leading manufacturers of that place, he was an earnest promoter of everything that could advance its interests. In 1857 Mr. Salt was elected President of the Chamber of Commerce. He also held at different times the offices of chief constable, magistrate, and senior alderman of Bradford, and was lately returned to Parliament for that borough.

#### SALAMANDERS AND BASILISKS.

PROBABLY the names of these fabled creatures will not fall unfamiliarly upon the ear, though particulars in regard to them may need to be told or written. There are certain words that inspire vague sentiments, we know not how or why, and I believe the two names that head this paper are conspicuous in that respect. When a popular superstition has become very general, extending to many countries, and holding its ground

for long periods, then we may fairly assume it to be a distortion of some matter of fact. Fancy and imagination, though, indeed, wild, are nevertheless more expansive than creative. They commonly lay hold of some truth, and, viewing it through some distorting medium, represent it to the mind as a prodigy.

First, about salamanders, concerning which such monstrous tales have been written and related. According to the fable narrated by authors so ancient as Aristotle and Pliny, a certain lizard-like creature, called by them the salamander, could live in fire for an indefinite period. It was said to love fire as fishes do water, revelling and basking amidst the fiercest flames. The belief in the reality of salamanders prevailed, thenceforth, in full force down to the middle ages; and was the subject of grave disquisition even so late as the year 1789. The alchemists accorded implicit faith to salamanders—worse luck to many a poor lizard. These enthusiastic gentlemen worked much with fire, as my readers need hardly be informed. They vainly hoped to change some of the baser metals into gold by furnace operations; and, somehow, the notion got into their heads that the salamander tribe could aid them. The first thing, then (following the advice of Mrs. Glasse, slightly modified) was to catch a salamander. According to repute, salamanders were to appearance like any ordinary lizards; they were only to be known by the result—Would they stand the fire? So, under this prompting, lizards were caught and put to the torturing experiment. Being put into a crucible, and the latter placed upon the fire, quicksilver was poured upon them through a long tube, in the expectation that if the poor lizard thus tortured were only of the true breed—a real salamandrine lizard—the quicksilver would change to gold. It never *did* change to gold, wherefore the inference that the real salamander had not been caught. All the worse for poor lizards; an immense number of which were thus cruelly sacrificed from time to time by those gold-seeking alchemists.

The experiment was one not considered without danger to the operator, who, therefore, was enjoined to use a long tube and to hold his breath. The foundation for this apprehension of danger was the belief that salamanders were poisonous beyond all other creatures. The Romans considered the salamander's poison to be not less dangerous than hemlock or aconite; hence came the proverb that he who was bitten by a salamander had need of as many physicians as the creature had spots on its body. "*If a salamander bites you, put on your shroud,*" the Romans were in the habit of saying. And not only was its bite considered fatal; as the tale went, anything a salamander had crawled upon was blighted. If it crept over an apple-tree, the fruit was supposed to be poisoned; nobody must eat the apples under penalty of severe illness; in this way many a fruit surfeit no doubt has been referred to operation of salamander poison. From the ancient Romans these superstitions passed down to the Italians; they took such firm hold of the imaginations of people that, in one of the middle-age Italian books of natural history, the circumstance is considered worthy of record, of a woman who, having given her husband surreptitiously a salamander to eat, thinking to kill him, the man, nevertheless, recovered.

Although the salamander was said to be capable of living in flame, yet, putting the records which bear upon this together, they seem a little inconsistent. Aristotle's reference to the salamander's power of living in flame (only founded upon what that philosopher had heard narrated) is to the effect

that the animal puts out fire on touching it. The testimony of Dioscorides is identical; it would not seem from these authors that salamanders particularly liked fire or lived in it from choice. In opposition to this, the notion prevailed amongst certain superstitious people, even down to the latter end of the last century, and perhaps later, that if any fire were kept burning continuously for seven years, a salamander would certainly be generated in it; the fire of glass furnaces being considered peculiarly liable. On what ground rested all this structure of fabulous belief? We shall soon recognise it. From ancient and mediæval we come to modern records: let us see what they testify about salamanders. In the first volume of the "Philosophical Transactions" I find a communication, being "an extract of a letter not long since written from Rome, rectifying the relation of a salamander living in fire." It consists of an extract of a letter "from that expert anatomist Monsieur Steno to Dr. Croon;" to wit, that a certain knight called "Corvini" had assured him that having cast a salamander brought by him out of the Indies into the fire, "the animal thereupon swelled presently, and then vomited store of black slimy matter, which did put out the neighbouring coals, to which the salamander retired, immediately putting them out again in the same manner as soon as they rekindled, and by this means saving himself from the force of the fire, for the space of two hours"—the gentleman above mentioned being then unwilling to hazard the creature any further. It is stated that afterwards it lived nine months; that he had kept it eleven months without any other food but what it took by licking the earth, and on which it had been brought out of the Indies, and so forth. The "rectification" I will not go into further than to remark that doubts are cast, not upon the knight Corvini's veracity, but his accuracy of observation. What I shall now relate will clear up the mystery of the salamander, revealing the small foundation of truth upon which such heaps of fable have been accumulated. In 1789 there happened to be a certain French consul in Rhodes—his name Pothonier. One day as Monsieur Pothonier was sitting in his chamber alone, he heard a loud screaming in the kitchen. It was the voice of his cook—a man cook. The consul dropped a letter he had been writing and ran to the kitchen. Arrived there, he found the cook in a state of great alarm—and for what, does the reader think? because he had seen (as he told his master) the devil in the fire! The consul, looking into the fire, saw a little animal with open mouth and palpitating throat. He laid hold of the tongs and tried to seize it; whereupon the creature, motionless until that time for two or three minutes, as the consul narrated, ran away and buried itself in a heap of hot ashes. The consul made a second attempt at capture, and was this time more successful. He caught the salamander, but not entire, the creature had lost the tip of its tail. The consul appears to have been what English folks call a "plucky man." Not heeding the tales told by alchemists about the danger of having to do with a salamander, Monsieur Pothonier caught the monster and made a cabinet specimen of him, pickling his salamander in a bottle of spirits of wine. Rhodes, you know, was associated with the memory of one of the seven wonders of the world already—the brazen Colossus—perhaps the French consul thought he had bottled up the eighth. At any rate he gave currency to all that had happened between him, the Rhodian cook, and the salamander. All! ay, perhaps a little more—not in the sense of wilful storytelling, but of unheeded exaggeration. The tale spread far and wide; it lost nothing on its travels. An Italian

naturalist called Sonnini, happening to hear of it, went to Rhodes and put himself in communication with Monsieur Pothonier. He saw the bottled specimen; and, alas for salamandrine fame! this was lost for ever. The Italian naturalist saw what the French consul had failed to see—viz., that the monster was half roasted. Now any creature could have done what the consul's lizard had been proved to have done; could have walked about in fire of a certain intensity and for a certain time, under the penalty of being half roasted; the questions suggested being how strong was the fire, and how long did the creature remain in it? Well, probably the fuel was brushwood—rosemary most likely—such being the ordinary fuel at Rhodes; hence one may gather some notion of the intensity of the fire. As regards time, this is a matter concerning which people under excitement often make great mistakes. "*Two or three minutes*," testifies the consul; but alack, Monsieur Pothonier! that is very, *very* loose. We approach an explanation; light begins to dawn upon us; and the circumstance is to be not lost sight of that lizards are "plenty as blackberries" at Rhodes. Along the ground they crawl and over the brushwood. The Frenchman's monster was stacked with the fuel, no doubt: with it thrown upon the hearth.

From these fables come we now to facts. Naturalists use the word "*salamandridæ*" to designate a family of lizards. A study of some of the characteristics of these will throw some light on the ancient and mediæval fables which we have been contemplating. The bite of these creatures is altogether innocuous as to poison; but the poisonous testimony rests on some foundation nevertheless. The salamandridæ-like toads are supplied with surface excrescences, which hold a poisonous secretion, like milk in appearance, and which, though innocuous to man and large animals generally, is poisonous—it may be even fatal—to smaller creatures. Proof of this was acquired by the Italian naturalist Sonnini, who, having provoked two grey lizards to bite a salamander, the creature first attempted to escape; that being impossible, however, the salamander ejected some of his poisonous secretion into their mouths. The result was that one died instantly, the other after suffering convulsions for about two minutes. Sonnini then put some of the juice into the mouth of another lizard, which immediately threw the animal into convulsions, terminating in convulsions of the whole of one side. Dr. Barton, who also experimented on salamanders, testifies that this fluid can be projected some distance. He tasted the fluid, which he found to be very acrid, something like the taste of corrosive sublimate. Thus, then, the poisonous myth is easily disposed of. But how about the fire? That fable is also explicable. When the creature is thrown into a fire, it ejects this secretion copiously, so that the whole surface of its body is completely wet.

With this explanation we may say farewell to the salamander, directing our scrutiny to another fabled ancient and mediæval monster—the basilisk, or king of serpents, as he was sometimes called. It does not, however, seem to have been a fixed conclusion with authors who have written about the basilisk whether this creature should be considered a serpent or a dragon, and of this little wonder, when we take into account the belief that no living creature might meet the basilisk's gaze and live. In two ancient books I have seen pictures of the basilisk nevertheless, and they both represent him under a different aspect. According to one picture, he is a scaly animal, having a long tail and a head exactly like a barn-door cock, from which latter circumstance the reader may remember that basilisks and cockatrices

were often confounded. The most curious part of the animal, however, are his legs, of which he seems to have twelve, each ending in a foot something like that of a barn-door fowl. The second picture varies radically from that just described, the basilisk being here figured as a veritable snake, not visibly different from any other snake, save that it has a growth on the top of its head, something like a regal crown, and a tongue barbed like an arrow or the prong of Neptune's trident. As regards the crown, I must not omit to state that the woodcut first mentioned delineates it too; in fact, whether dragon or serpent, the kingly nature was an invariable attribute of the basilisk. Authors who adopted the serpent notion testified that the basilisk lived in wildernesses and deserts, far from the abode of men; that he would suffer no creature to approach him and live—no creature, that is to say, but one, of which more presently. They averred that, so soon as any other snake had settled to a meal, and the king of serpents nosed it, his majesty began to hiss so that he might be heard a long way off, when the common snake had to sneak away, his dinner untouched, under pain of capital punishment. Wherever the king snake crawled, tree, shrub, and flower withered; all herbs save one—this the rue. The basilisk was reputed to kill his victims in one of three ways—by bite, by ordinary touch, and, most extraordinary of all, by the light of his eye-glances. Nevertheless testimony is not wanting of certain bold explorers who hunted up basilisks to their lairs and killed them. The mode of destruction was not less extraordinary than the basilisk's own means of inflicting death. The explorer took with him a mirror, which he held up in front of his person. The basilisk would look at that mirror, seeing not the hunter, of course, but himself; he would then fall dead, killed by his own poisonous eye-glances.

One animal, as already noted, was proof against the basilisk; that creature was the weazel. According to ancient testimony, this little brute, conscious of his power, far from avoiding the king of serpents, sought him out on every possible occasion, attacked him, and invariably killed him. It was testified that before doing battle the weazel would fortify himself by eating rue, the only vegetable, be it remembered, proof against the basilisk. Shall we ever elicit one spark of truth from out all this fable? Yes, presently, and in regard to the weazel at once. In India a certain weazel-like animal called the mongoose is found, and it is a perfectly well-attested fact that this creature serves the dreaded cobra exactly as the ancients represented their weazel as serving the king of serpents, with the one exception, that the mongoose does not prepare himself for the attack by eating rue. He does eat a certain vegetable, however, previous to the encounter, and that brings the Indian fact very close to the classic fable. Putting the two together, it is not possible to doubt that the Greeks and Romans, having heard of what happens between mongoose and cobra, mixed up the recital with their fables concerning the basilisk. It now remains to discover the germ of truth that underlies the fable about the deadly glare of basilisk eye-glances. Truth is said to be in a well; down wells and mine-shafts, therefore, will we go to find it. You will please bear in mind that in ancient times basilisks were said to inhabit wildernesses and deserts, and lonely forests; indeed, to do these terrible creatures justice, they never seem to have thrust themselves into the presence of man. As time rolled on into the middle ages, basilisks would have seemed to have changed somewhat their habitat, their place of domicile. Perhaps climate might have had something to do with it; records of mediæval basilisks

belonging mostly to central and western Europe. Middle-age and modern basilisks were said to take up their residence in mines and wells; many the tale of people struck dead on going down inadvertently. Having had occasion some time ago to look into the early records of British coal-mining, I was struck by the number of deaths attested as being the result of coming across a hidden basilisk.

In a book of natural philosophy published during the reign of Charles II, I find the postulate taken absolutely for granted, not merely that basilisks do exist, but that they kill by the rays of their eye-glances. Nor is this all, the writer committing himself to *whys* and *wherefores*. Oh dear! the simplest thing imaginable; nothing whatever so plain, just in point of fact like this:—When the basilisk stares at you, a number of sharp angular particles dart from his eyes into yours (just like so many small flint splinters, I suppose); then right into your brain they go; and you fall and die incontinently. Yes, our author is quite certain basilisks *do* exist; and, on the evidence of people struck down dead in mines and wells, he, with a twist in his judgment, had good warrant. Unquestionably this calamity did happen—does happen—will continue to happen; but how and from what cause? Not that the victim has seen something, but has smelt something—a noxious poisonous invisible gas, carbonic oxide or sulphuretted hydrogen, most probably. And thus do we dispose of basilisks.

I do not know what impression the recital of these fables and their elucidation has left upon the reader's mind: there remains one of something more than curiosity gratified upon my own; of consolation and gratitude—namely, that God has been more merciful to His creatures than man's wild fancy has imagined. Were there such creatures as the basilisk, whose very eye-glances would strike us dead, then how fearful existence would be!

#### GROWING YOUNG:

##### AN IDYLL OF THE CITY.

Success had crowned our venture once again.  
My fortunes founded, and provision made  
To keep my heirs in wealth, I now had reached  
The goal of my desires, so long pursued,  
A life of labour sought its end in rest.

There was a freedom when I woke at morn,  
And found no cares to bind me for the day;  
And yet I missed the zest of busier hours.  
It pleased me o'er the acres newly bought  
To wander slowly, when the sun was high,  
And through the woods and down the leafy lanes,  
To watch the springing birds; or, mile on mile,  
To give my horse the rein, and as I came,  
Swift passing, to receive at cottage doors  
The rustic homage to a stranger due:  
Albeit I soon grew weary, for my limbs  
Had not the strength of youth, nor did my thoughts  
Move as of yore with glad alacrity.  
The thrill of earlier joys I could not feel,  
Nor could my wealth buy back; though it were worth  
A year's full income to be young once more,  
With fuller life to taste the good I held.

Friends brought congratulations, and I told  
With pride my plans, as they went round to view;  
And oft, when winter darkened, to my board  
They flocked and pledged me deep in draughts of wine;  
And oft there was a sound of mirth and song,  
When laughing maidens gathered through the gloom,  
And joined their beauty in the festive dance.  
Yet oft the chambers of my heart were dull,  
The lights grew dim, the music hushed and fell  
To a low monotone: I sighed, and knew  
My crown of happiness was incomplete.  
Earth's brimming cup hath ever bitter dregs:  
A few more years, and what availed my lands?

And in the great uncertainties of time,  
How might it fare with those I left behind?

One morning, just as spring returned, the first  
That we had watched in our new garden haunts,  
There came an ugly rumour from the town  
Of sudden failures, spreading fear around:  
A trusted Bank, in the great city's midst,  
Had closed its doors upon a clamorous crowd;  
There was a rush for money, and none knew  
To what results of mischief this might run.  
Oh that disastrous week! for day by day  
The hurrying wheels that through the country sped,  
On iron roads hard as the ways of men,  
Brought only news of ruin or of loss,  
What anxious eyes the daily paper searched!  
I, too, began to tremble, as I marked  
How shares went down in which I had full faith;  
For still I held, as sure of safe returns,  
Not needing thought, large stakes in several schemes.

The dewdrops glistened in the cheerful sun,  
And all had gathered to our morning meal,  
When from the lodge the village post rang out  
Its sounding peal. With secret fear quite new  
I watched the man's brisk step across the lawn—  
The glow of healthful work was in his face—  
And calling, through the open window took  
The letters from him. There was one I saw  
In a familiar hand, but blurred with haste;  
I broke it open as I stood, and read  
In silence, with a glance that summed the page,  
While all the household waited with fixed eyes.  
Then with quick turn I hurried to the door;  
And, as it closed behind me, startled heard  
My wife's affrighted cry. I could not think;  
A vague confusion seemed to fill my brain,  
A blank oppressive pause to hold my life.  
I staggered from the house; then strove to brace  
My manhood in a firmer step—to grasp  
The truth—to see the ill that threatened me.  
With puzzled care I gathered all the facts,  
And drew the inference, though my heart recoiled.  
It was too clear: my bankers, like the rest,  
Had stopped; my favourite companies had failed;  
The shares I held and prized were worse than lost;  
I scarce could meet the claims that must arise.  
So huge the figures were, they closed me round  
In a stupendous ruin—hard and cold;  
And I seemed bound as victim to be slain,  
For Mammon hath his sacrificial stone,  
Where quivering hearts with cruel delays are drained.  
Yes, all must go: the hoarded gains of years—  
House—lands—position—what if very life?  
Were not death better than to sit and beg,  
With pauper children, in a crumbled home?

It was the third night ere I slept at all.  
Then, as I laid me down in calmer mood,  
Thoughts of the past came flooding through my mind:  
Was it for this that I had spent my strength?  
I wandered back to youth's more placid days,  
And bitterly rebuked the choice I made,  
When wealth became the idol of my life.  
Then as sleep fell upon my weary eyes,  
My present pain in dreamy mists was quenched.  
I know not how, but soon there seemed to grow  
An interval betwixt me and my loss,  
As though those hours of tumult in their flight  
Left me receding: as—in common phrase—  
A traveller gazing as he sits, may feel  
When from behind a swift train rushes by,  
With wildering clamour clinging to its wheels.

I walked the crowded streets with eager pace,  
My mind revolving busy schemes of gain;  
I took my seat in board-rooms, more than one,  
Where shares and dividends were all the talk;  
I met in quiet parlours keen shrewd men,  
Who knew the arts to buy the public faith,  
Who poured out wisdom as they filled their glass,  
And when they drained it drew their knowledge in;  
I dined at tables where rich viands gave  
A relish to dry business (as with port  
A thrifty housewife flavours musty cheese);  
I rated clerks, and counted figures up—  
Wrote urgent letters—telegraphed in brief—  
Then called a cab, and hurried to the docks:  
—Oh, what long years I seemed to live again,  
Absorbed in one chief aim!—till, as I slept,

I wearied; nor had power to break the link  
That bound each day—the seventh as the six—  
In toilsome bondage to the lusts of self.  
Why should I cherish thoughts that bore no fruit?  
My friends I chose to help my sordid views!  
I dared not own it, but I only knew,  
My soul had narrowed to the world's base groove.

Then as I dreamed, I felt my heart grow soft;  
I gave a wistful uplook to the heavens;  
A tender memory drew my thoughts above,  
And from the height bent down an angel form.  
Tears started to my eyes. What strange new sense  
Was stirring through me with a deeper life?  
And then I thought I stood beside a grave,  
And heard the burden, "dust to dust," and saw  
A coffin lowered 'twixt its hollow walls,  
And looked and read a dear name glistening there:  
It was my daughter's burial years ago.  
Within her chamber, lo! I seemed to sit,  
And watch the flickering breath till it was still.  
Her whispered words of heavenly hope I caught;  
The last sad kiss I gave; and marked the smile  
That crowned her victor through the Cross o'er death:  
And as I trod the verge of that dread sea  
Which parts poor mortals from the Land of Life,  
Its mystic murmurs filled my stricken ear;  
And, though I wandered inland far away,  
The solemn echo still—I thought—must sound  
Through all my days. Ah! I was younger then.

And still the years dropt from me. In the midst  
Of rosy children I was welcomed home.  
With pretty kisses, clutching round my neck,  
They claimed their hour, that, like the sunshine, kept  
A soft green place within my life, for loves  
And flowers of human sympathy to bloom.  
I nursed ambition then, but it seemed twin  
To my affection, and in those first days  
Lacked the fierce power to master all my heart:  
For children are the messengers of God,  
Their airy fingers pluck the cobwebs down,  
And let the light of heaven round the soul.  
As these glad voices in the distance died,  
A tiny form within my arms was placed—  
Our first-born, learning with a cry to breathe  
This earthly air; and with a tremulous awe  
I took the tender burden, newly given:  
My boy! oh, might he live, to take as heir  
High place and name among the ranks of men!

And then there fell the clangour of sweet bells,  
Pouring delicious music through the trees,  
And down the churchyard with my bride I walked:  
And, oh, what dreamy days I lived once more!  
While all the land shone in a golden glow,  
And fortune moved too slowly for my will.

How swiftly I grew young! I heard a voice—  
My father's—say, "Well, George, if so you will,  
God bless your choice, and prosper your career!  
But mind, your cousin had a special gift  
And training different: you must not look  
To follow him, lest, where you most aspire,  
You foothold miss, and fall." I only laughed.  
—And then in anxious musings I discussed  
The pros and cons on either side that lay.  
The law I hated, though friends warmly praised;  
No: rather would I try a splendid chance  
Where Frank had won; and in the city sit  
By busy streams, and watch for golden fish.

And then I lived laborious college days;  
I answered questions in the open schools;  
With friends congenial made long country raids;  
Or held the bat; or on the river calm  
Fast rowed, while from the bank a lusty crowd  
Hurled words of threatening at our reckless crew.  
My pulse beat full then, and each heart-throb sent  
A luxury of life through every vein.  
What high ambitions, what free clash of thought!  
What wordy raptures over eyes, and stars,  
And all the world of beauty, real or feigned!

Now I became a boy, with feeble arm,  
But fresh and ardent, trusting and sincere.  
I climbed the coach, and travelled home from school,  
And felt my heart glad with a simple love.  
There at the rectory gate, beside the elm,  
My mother stood, and from his study straight  
My father came, quick as the wheels gave sound;  
And proud they led me in. Oh, dear, dear home!  
Where every morning prayer as incense rose,  
And every evening brought a blessing down,  
And all the life was cool, and calm, and sweet.

And there a little child again I played,  
And learnt to prattle at my mother's knee.

With what strange wonderment I felt my strength  
Contract to feebleness, and lost the sense  
And memory of things, and power to think;  
Then put on nature's pure white swaddling clothes  
Of innocence, and lapped my life in love.  
Outstretching timorous hands, I groped to find  
A presence near, and with a cry—*awoke!*

I woke—to days of troubled thought and pain;  
I rose—an old man from my couch, with hairs  
All grey, and eyes that grew more dim with care;  
But could not lose the memory of that dream.  
Oh, could we keep in age the heart of youth,  
And still in manhood's prime be babes in guile!  
Then came to me those ancient words divine:  
"Except as little children ye become,  
Ye cannot pass the kingly gates of heaven;"  
Nor striving, as my father preached, possess  
On earth its holy privilege and power.  
I bowed my head in shame; and from their tomb  
Long buried thoughts arose, that wore the garb  
Of other days, and spoke a language old.  
The truths which boyhood knew rebuked the man:  
O treacherous world that robs the soul with lies,  
O foolish soul that renders up its faith!  
Such life is rather death, not gradual growth  
Into ripe form and strength, but slow decay;  
The years that in full tide should bear us home  
Fast ebb, and leave us stranded on the sands.  
We strive and pant, and still the goal recedes;  
We lose in gaining, and our gain is dross;  
The gold we handle has a leaden weight—  
Oft, of such ore the bars and bolts are framed  
That hold men prisoners from the light of day.  
Was it a gleam from the celestial world  
That broke my darkness now? The wish went up,  
Half prayer, and half regretful sigh, that there,  
Where moth cannot corrupt, nor thief break through,  
My treasure were secure!

Months slowly passed;

God helped me—how I knew not—in the strife.  
The lands were sold, the mansion silent left,  
And we went forth to find another home.  
Yet from the wreck, despite our fears, was saved  
Enough to keep a humble roof o'erhead.  
My sons launched bravely on the troubled sea;  
My daughters blest us with contented love;  
And through the storm I came at last to peace—  
By gradual progress, for with varying winds  
My soul was long perplexed, in struggle sore,  
Ambition prostrate in the dust was laid,  
A narrower circle bounded my desires,  
And as I trod the quiet round obscure,  
A voice within me spoke a knowledge new—  
With just reproaches chiding self and sin,  
With softer whispers turning grief to use.  
But sometimes fell despair would seize my heart,  
And who should cast the evil spirit out?  
Then fever came, and bound me with hot hands,  
And bore me wandering through fantastic wilds,  
And left me weakened as a babe, to lie  
And hunger for new life. In those lone hours  
Of silent thought, my dream would oft recur,  
And much I mused on all the by-gone years,  
Their mystery and sin, and that great blow  
Which crushed their pride, and made their projects vain.  
Then, craving steadfast truth whereon to rest,  
The sacred Book, beloved in childhood's home,  
Again I opened; there I searched to find  
The words that to the childlike offered heaven;  
And read below the story of the man  
Who came, though rich, to seek eternal life,  
Who kept the law, yet would not yield his wealth;  
And how the Saviour "loved him," though with strict  
Command he bound him to sell all and give.  
How shall I tell the conflict waged within,  
In doubt and darkness, through succeeding days?  
Till bruised and wounded, nigh to death I lay,  
When lo! there passed a radiance o'er my soul,  
Which sent a thrill through all my secret life,  
And drew my eyes to see the Healer near.  
His coming made me whole; and as I stood,  
Erect in thought, though bowed in body down,  
I learned the secret of another youth.  
There is a life that knows no more decay,  
That keeps the freshness and the bloom of hope,  
That blends all good in a diviner growth,  
And fits for service which is constant joy.